Color Pyramid
Everyone knows that when colors are mixed, new colors are made. But try this experiment to see what effect colored screens, or filters, have on particular colors. You will find that the color pyramid is a very beautiful model to keep.

Materials
- stiff, white card 35cm square
- pencil, ruler and protractor
- scissors
- modelling knife
- sheets of red, yellow, colorless and blue cellophane, each 12cm square
- clear glue
- clear sticky tape

1. Draw a straight line 30cm long at the bottom of the card.
2. Put the center of the protractor on one end of the line and mark the 60° angle, as shown.
3. Repeat step 2 on the other end of the line.
4. Draw straight lines from the ends of the line through the points marked.
5. Cut out the triangle.
6. Measure and mark half-way along each side of the triangle.
7. Draw dotted lines to join up the marks you have made. This makes four smaller triangles.

8. Measure and draw borders 1 cm wide inside each of these four smaller triangles.

9. Use the modeling knife to cut out the solid line triangles as shown. This makes four small windows.

10. Lay one of the cut-out triangles on one of the sheets of cellophane.

11. Cut a cellophane triangle 1 cm larger than the triangular pattern.

12. Repeat steps 10 and 11 using the other sheets of cellophane.

13. Neatly glue a cellophane triangle over each window.

14. Write the name of the color below each cellophane window.

15. Guided by the ruler, pull the tip of the scissors along the dotted lines to score them.
16. Fold the card on the dotted lines and tape the pyramid edges together with clear sticky tape. 
   *This shape is called a tetrahedron.*

17. Look through one window toward the light. Twist and turn the model to see different colors.

The windows filter light, allowing only certain colors through. Blue lets blue, magenta (dark pink) and green pass. Red allows only red, magenta and orange. Yellow allows yellow, orange and green. Red and yellow filters combined allow only orange, the color common to both, to pass. Which color combinations enable you to see green and magenta?